

QUESTIONS AND ANSWERS

PLEASE REFER TO THE GENERAL FAQS SECTION OF ARPA-E'S WEBSITE ([HTTP://ARPA-E.ENERGY.GOV/?Q=FAQ/GENERAL-QUESTIONS](http://arpa-e.energy.gov/?Q=FAQ/GENERAL-QUESTIONS)) FOR ANSWERS TO MANY GENERAL QUESTIONS ABOUT ARPA-E AND ARPA-E'S FUNDING OPPORTUNITY ANNOUNCEMENTS. ADDITIONAL QUESTIONS SPECIFIC TO THIS FOA ONLY ARE INCLUDED BELOW. PLEASE REVIEW ALL EXISTING GENERAL FAQS AND FOA-SPECIFIC QUESTIONS BEFORE SUBMITTING NEW QUESTIONS TO ARPA-E.

I. Full Application Questions:

Q1. I HAVE QUESTIONS ABOUT THE DE-FOA-0002784 B. INCREASING TRANSPORTATION EFFICIENCY AND RESILIENCY THROUGH MODELING ASSETS AND LOGISTICS (INTERMODAL).

(1) IS CATEGORY 2 LIMITED TO CONTAINERS ONLY, OR DOES IT ALSO INCLUDE TRAILERS?

(2) WHAT IS THE MEANING OF "<24 HR" AND "<1 HR" IN THE CONTEXT OF THE FULL SYSTEM (GLOBAL) AND LOCAL OPTIMIZATION FOR EXISTING ROUTES SHOWN IN FIGURE 3 OF THE FOA?

(3) ON PAGE 3, FIGURE 3. LOGISTICS MODEL.

SCOPE: COMPLETE NATIONAL INTERMODAL CHAIN FROM PORT ENTRY TO WAREHOUSE.

DOES THIS MEAN IT ONLY CONSIDERS CONTAINERS FROM PORTS TO WAREHOUSES? HOW ABOUT CONTAINERS FROM WAREHOUSES TO PORTS? AND ALSO BETWEEN WAREHOUSES IN THE US?

ANSWER: 1. The goal of Category 2 is to create a full system and real-time model for optimization of national intermodal logistics scheduling, for the purpose of increasing system-wide operational energy efficiency. Figure 3 illustrates the main components of this technical category. The scope of this category includes freight transportation by water, rail, and road.

Category 2 is not limited to containers and can include trailers.

2. Category 2: Intermodal Logistics Model - A complete and validated set of logistics models of the national intermodal freight transportation system that enable predictive and responsive optimization of modal choice, inter- or intramodal transfer, and routing. The logistic model must operate both as a full (<24hr) intermodal system planning tool and a quasi-real-time (<1hr) dynamic scheduler. Category 2 efforts are encouraged to consider and enable optimization around likely future infrastructure rollout as modeled in Category 1.

3. The goal of Category 2 is to create a full system and real-time model for optimization of national intermodal logistics scheduling, for the purpose of increasing system-wide operational energy efficiency.

Q2. WE INTEND TO SUBMIT AN APPLICATION BUT HAVE A FEW QUESTIONS. COULD YOU CAN HELP OR DIRECT US TO SOMEONE WHO CAN HELP ANSWER?

- A. PLEASE ADVISE ON PARTIES THAT CAN BE THE PRIME RECIPIENTS.**
- B. WE UNDERSTAND UNDER SECTION III.B THAT THE PROJECT COST SHARING IS 10 PERCENT. COULD YOU PLEASE COMMENT ON THAT?**
- C. UNDER THE TEAM ORGANIZATION AND CAPABILITIES, ARE WE DESCRIBING THE CURRENT TEAM OR SHOULD WE INCLUDE ALL THE FUTURE TEAM FOR THE 30 MONTHS PROJECT THAT WE MIGHT NOT HAVE CURRENTLY? FOR EXAMPLE, IF WE PLAN TO HAVE DATA EXPERTS IN YEAR 3, DO WE INCLUDE THAT EXPERTISE IN THE PROPOSAL?**

ANSWER: A. For eligibility criteria, see Section III.A of the FOA.

- B. For cost share requirements, please see Section III.B of the FOA.
- C. It is recommended to have all (future included) participants on the project included in the proposal.

Q3. WE ARE PUTTING TOGETHER A PROPOSAL FOR THE INTERMODAL OPTIMIZATION FOA. COULD YOU PROVIDE CLARIFICATION ON THE SCALE OF ANALYSIS EXPECTED? E.G. THE ASSUMPTION IS THAT IT SHOULD BE NATIONWIDE, BUT GIVEN DATA LIMITATIONS IS ARPA-E ALSO CONSIDERING REGIONAL OPTIMIZATION MODELS? FOR EXAMPLE, THE WESTERN INTERCONNECT WITH MULTIPLE STATES FOR NON AND ON ROAD MODES, BUT NOT TOTALLY NATIONAL IN SCOPE.

ANSWER: The overarching goal of this program is to demonstrate deployment and operational strategies that bring freight transportation in line with national net-zero-by-2050 targets. Examples of publicly available data sets are given in FOA. The applicant is not limited to these data sources. All required data sets must be explicitly stated in the application. Data availability should allow for higher fidelity in a region.